

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015503**Date Inspected:** 10-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	N/A	CWI Present:	Yes	No
Inspected CWI report:	Yes No N/A	Rod Oven in Use:	Yes	No N/A
Electrode to specification:	Yes No N/A	Weld Procedures Followed:	Yes	No N/A
Qualified Welders:	Yes No N/A	Verified Joint Fit-up:	Yes	No N/A
Approved Drawings:	Yes No N/A	Approved WPS:	Yes	No N/A
		Delayed / Cancelled:	Yes	No N/A
Bridge No:	34-0006	Component:	OBG Trial Assembly	

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 9AW to 9BW

This QA Inspector performed Dimension Control Inspection along with Caltrans QA Inspector Mr. Manikandan on the Transverse Splice T-Ribs to T-Ribs for the Segment 9AW to Segment 9BW between Panel Point (PP) 73 to PP 74 at the following locations:

Work Point W6 towards Work Point W4 (Side Panel Cross Beam Side) total 19 T-Ribs.

Work Point W4 towards Work Point W3 (Bottom Panel) total 18 T-Ribs.

Work Point W3 towards Work Point W1 (Side Panel Counter Weight Side) total 19 T-Ribs.

The QA Inspector measured the Vertical Offset using 1(One) Meter Straight Edge and measured the Horizontal Offset on the web using a Bridge Cam gauge.

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The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 8AW to Segment 8BW (U-Rib to U-Rib)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the U-Rib to U-Rib at the transverse splice between Panel Points (PP) 64 and PP 65 for Segment 8AW to Segment 8BW. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00415 dated July 10, 2010.

The bolt sizes used were M22 x 65 RC Lot # DHGM220092 and the final torque value established was 466 N-m.

The bolt sizes used were M22 x 80 RC Lot# DHGM220029 and the final torque value established was 447 N-m.

The bolt sizes used were M22 x 85 RC Lot # DHGM220104 and the final torque value established was 380 N-m.

The manual torque wrench used to verify tension was S/N XO2-779. Please reference the pictures attached for more comprehensive details.

Segment 8BW to Segment 8CW (U-Rib to U-Rib)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the U-Rib to U-Rib at the transverse splice between Panel Points (PP) 67 and PP 68 for Segment 8BW to Segment 8CW. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00415 dated July 10, 2010.

The bolt sizes used were M22 x 65 RC Lot # DHGM220092 and the final torque value established was 466 N-m.

The manual torque wrench used to verify tension was S/N XO2-779. Please reference the pictures attached for more comprehensive details.

Segment 8AW (Road Barrier Bracket)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Road Barrier Bracket to the Deck Panel I-Rib at Corner Assembly between Panel Points (PP) 60.5 and PP 61 for Segment 8AW at the Cross Beam and Counter Weight side. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00415 dated July 05, 2010.

The bolt sizes used were M22 x 120 RC Lot # DHGM220051 and the final torque value established was 433 N-m.

The manual torque wrench used to verify tension was S/N XO2-779.

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Segment 8CW (Road Barrier Bracket)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Road Barrier Bracket to the Deck Panel I-Rib at Corner Assembly between Panel Points (PP) 71 and PP 71.5 for Segment 8CW at the Cross Beam and Counter Weight side. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00415 dated July 05, 2010.

The bolt sizes used were M22 x 120 RC Lot # DHGM220051 and the final torque value established was 433 N-m.

The manual torque wrench used to verify tension was S/N XO2-779. Please reference the pictures attached for more comprehensive details.

Segment 9CE to 9DE

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Fillet weld. The Weld joint was designated as SP691-001-021~030. The welder identification was 067947 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132. The piece mark was identified as T-Rib to T-Rib at transverse splice hold back area, Cross Beam side.

Segment 9CE to 9DE

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Fillet weld. The Weld joint was designated as SP546-001-036~049. The welder identification was 037907 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132. The piece mark was identified as T-Rib to T-Rib at transverse splice hold back area, Cross Beam side.

Segment 9CE to 9DE

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Fillet weld. The Weld joint was designated as SP586-001-018~029. The welder identification was 068501 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132. The piece mark was identified as T-Rib at the transverse splice hold back area, Cross Beam side.

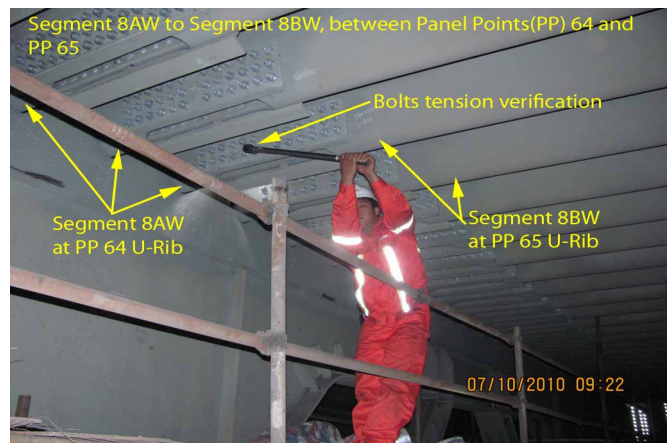
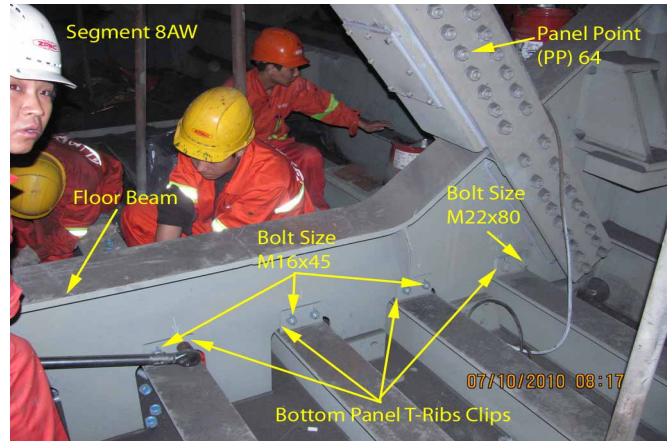
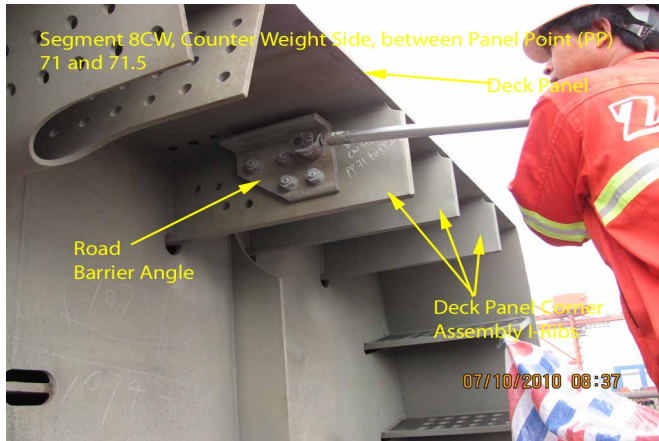
Segment 9CE to 9DE

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Fillet weld. The Weld joint was designated as SP626-001-031~042. The welder identification was 068493 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132. The piece mark was identified as T-Rib to T-Rib at transverse splice hold back area.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer